

20. TRANSPORTATION

Table 20-1. FEDERAL RESOURCES IN SUPPORT OF TRANSPORTATION
(In millions of dollars)

Function 400	1998 Actual	Estimate						
		1999	2000	2001	2002	2003	2004	
Spending:								
Discretionary Budget Authority	16,005	13,330	13,518	14,159	14,709	15,333	15,844	
Mandatory Outlays:								
Existing law	2,063	2,071	2,404	2,034	1,424	1,890	1,844	
Proposed legislation	12	12	13	14	14	
Credit Activity:								
Direct loan disbursements	151	756	900	N/A	N/A	N/A	N/A	
Guaranteed loans	686	120	120	N/A	N/A	N/A	N/A	
Tax Expenditures:								
Existing law	1,645	1,690	1,740	1,810	1,895	1,985	2,070	

N/A = Not available

America's transportation system consists of public and private systems financed by Federal, State, and local governments, and the private sector. Our intermodal transportation network is vital to America's standard of living—transportation becomes a part of almost every good and service produced in the economy, and the mobility it provides is an essential ingredient of daily life. The economy grows and works best when there are few impediments to goods and people getting where they must—thus an economy that works for all Americans depends on a transportation system that is efficient, reliable, and accessible. Above all, however, safety is our foremost goal. The Federal Government spends about \$50 billion a year on transportation, meeting these challenges today and into the 21st Century.

Transportation Equity Act for the 21st Century

A significant portion of Federal investment in transportation infrastructure is for highways, transit, and highway safety programs. On June 9, 1998, the President signed the Transportation Equity Act for the 21st Century (TEA-21), which authorizes a total of

\$218 billion for these surface transportation programs from 1998–2003. In addition to providing for increased infrastructure investment, TEA-21 strengthens transportation safety programs and environmental programs, establishes a welfare to work transit initiative, and continues core research activities. TEA-21 also creates two new budget categories designed to “guarantee” funding for these programs for the first time in history. These categories prevent the expenditure of funds on programs other than highways, transit, and highway safety. Of the total amount of funding authorized by TEA-21, \$162 billion is provided within the Highway Category Guarantee and \$36 billion is within the Transit Category Guarantee. The remaining \$20 billion is not guaranteed. The budget provides \$28.1 billion and \$5.8 billion for these two categories, respectively.

Safe Operations

The Federal Government works with State and local governments and private groups to minimize the safety risks inherent in transportation. It regulates motor vehicle design and operation, inspects commercial vehicles, educates the public regarding safety,

directs air and waterway traffic, rescues mariners in danger, monitors railroad safety and conducts safety research.

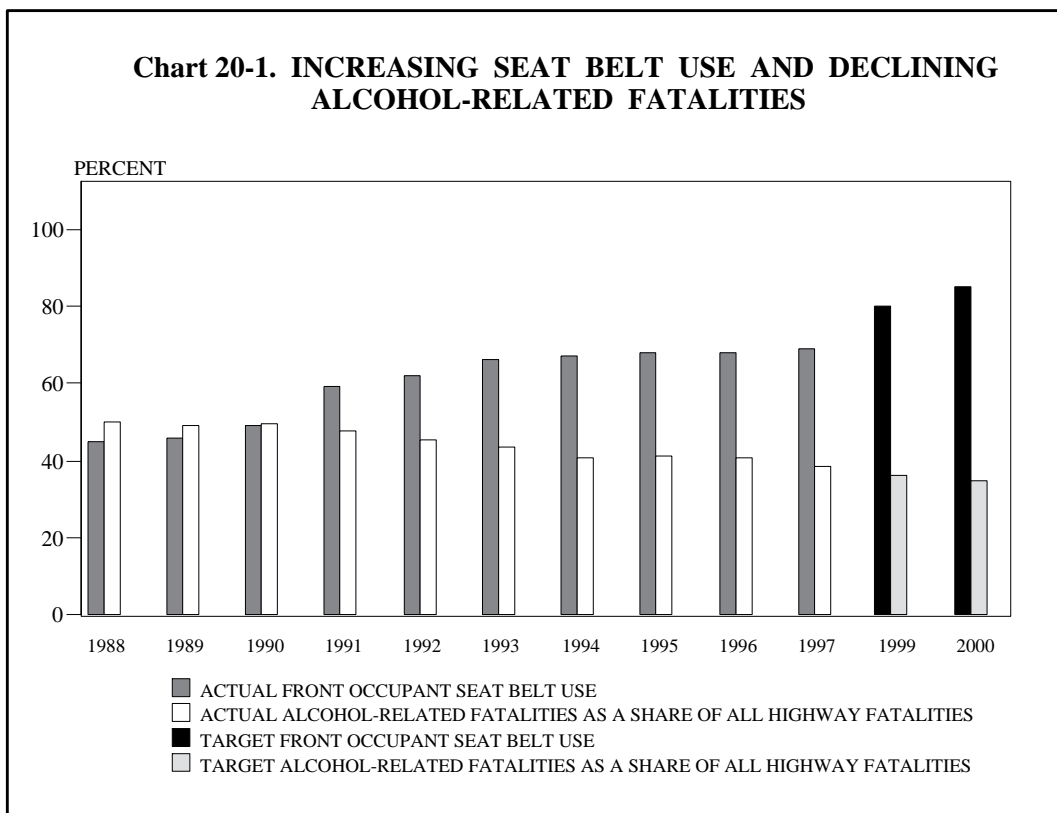
A range of Federal activities work to reduce the number of deaths and injuries from highway crashes, which number about 42,000 and over three million a year, respectively. Federal programs reach out to State and local partners, industry and health care professionals to identify the causes of crashes and develop new strategies to reduce deaths, injuries, and the resulting medical costs. These partnerships yield results—in 1997 the Nation's safety belt use reached an all-time high of 69 percent. A particularly senseless tragedy—alcohol related highway fatalities—reached a new low in 1997, at 38.6 percent of all highway deaths. Along with coordinating such national traffic safety efforts, the National Highway Traffic Safety Administration (NHTSA) regulates the design of motor vehicles, investigates reported safety defects, and distributes traffic safety grants to States. The budget proposes \$404 million

for NHTSA, a 12-percent increase over 1999, and fully supports NHTSA's impaired driving programs, along with a new initiative that focuses on drinking and driving by high risk groups including 21 to 34-year-olds, repeat offenders with high blood alcohol content, and youthful drivers (see Chart 20-1).

In partnership with the highway community, the Federal Highway Administration (FHWA) works to identify top roadway safety issues and countermeasures. In 2000, efforts will focus on run-off-road and pedestrian/bicycle crashes, since these safety problems contributed 36 percent and 15 percent respectively of total highway fatalities in 1997. In 2000 safety construction programs will contribute \$565 million to correct unsafe roadway design and remove roadway hazards.

The FHWA's National Motor Carriers program, for which the budget proposes \$105 million in 2000, develops uniform standards that improve motor vehicle and driver safety, helps coordinate law enforcement activities, and aligns interstate trucking safety require-

Chart 20-1. INCREASING SEAT BELT USE AND DECLINING ALCOHOL-RELATED FATALITIES



ments. The program maintains national uniform driver testing requirements as well as information systems that prevent unsafe operators from registering vehicles. The program also provides grants to States to enforce Federal and compatible State standards for commercial motor vehicle safety inspections, traffic enforcement, and compliance reviews. The Department of Transportation seeks to:

- Reduce the rate of highway-related fatalities per 100 million vehicle miles traveled (VMT) from 1.7 in 1996 to 1.5 in 2000; and reduce the rate of injuries from 141 in 1996 to 124 per 100 million VMT in 2000.

Perhaps the Federal Government's most visible transportation safety function involves air traffic control and air navigational systems. The Federal Aviation Administration (FAA) handles about two flights a second, moving 1.5 million passengers each day. Through its regulatory and certification authorities, the FAA also promotes aviation safety. In 2000, the FAA will perform nearly 320,000 safety related inspections. To meet safety needs, the Administration plans to spend \$8.4 billion on FAA operations and capital modernization, 10 percent more than in 1999. In 2000, the FAA seeks to:

- Reduce the fatal aviation accident rate for commercial air carriers from a 1994–1996 baseline of 0.037 fatal accidents per 100,000 flight hours. The 2000 target is 0.033 per 100,000—with the reduction to be achieved in six key areas outlined in the agency's Safer Skies Agenda.

The Federal Government also plays a key safety role on our waterways. The Coast Guard operates radio distress systems, guides vessels through busy ports, operates reliable and safe navigation systems, regulates vessel design and operation, enforces U.S. and international safety standards, provides boating safety grants to States, and supports a 35,000-member voluntary auxiliary that provides safety education and assists regular Coast Guard units. The Coast Guard is recognized as the world leader in maritime search and rescue, maintaining and operating a fleet of cutters, boats, and aircraft that saved over 4,000 lives in 1998 alone. The budget proposes \$3.3 billion for Coast Guard oper-

ations and capital. The Coast Guard seeks to:

- Reduce the number of recreational boating fatalities from a 1997 baseline of 819 fatalities. The 2000 target is at or below 720 fatalities.
- Continue to save at least 93 percent of all mariners reported in imminent danger.

The Federal railroad safety program, for which the budget proposes \$132 million in 2000, works in partnership with the rail industry. The Safety Assurance and Compliance program brings together rail labor, management and the Federal Government to determine root causes of safety problems. This partnership has produced results: from 1994 to 1997, the railroad-related fatality rate, on-the-job casualty rate, and train crash rate fell by 19, 53, and eight percent respectively. The Federal Railroad Administration seeks to:

- Reduce the rate of rail-related crashes from a 1995 baseline of 3.91 per million train-miles to 3.32 or less in 2000; and to reduce the rate of rail-related fatalities from a 1995 baseline of 1.71 per million train miles to 1.54 or less in 2000.

Similarly, the Federal pipeline safety program has implemented several risk management projects to improve the targeting and effectiveness of regulations while reducing or minimizing their costs. The Federal Government also develops regulations and standards for hazardous materials shipping, and enforces those standards for every mode of transportation. DOT seeks to:

- Reduce the number of serious hazardous materials incidents in transportation to 411 or fewer in 2000, from a peak of 464 in 1996.

Infrastructure and Efficiency Investment

America has about four million miles of roads, 580,000 bridges, over 180,000 miles of railroad track, 5,400 public-use airports, 6,000 transit systems, 350 ports and harbors and 25,000 miles of commercially-navigable waterways. This extensive, intermodal network is essential to the Nation's commerce, and enhancing its efficiency advances economic

growth as well as international competitiveness.

The Federal Government helped develop large parts of the system, with funding mainly through user fees and transportation taxes. Total Federal investment represents about half of total public investment—that is, \$29 billion of the \$61 billion of Federal, State, and local spending on transportation infrastructure in 1995. Investment is targeted to maintain and improve the condition of the existing system while at the same time advancing safety, quality, efficiency, and the intermodal character of transportation infrastructure. In 2000, Federal transportation infrastructure investment would rise to \$36.4 billion, an increase of \$1.3 billion or about four percent over 1999 (see Chart 20-2).

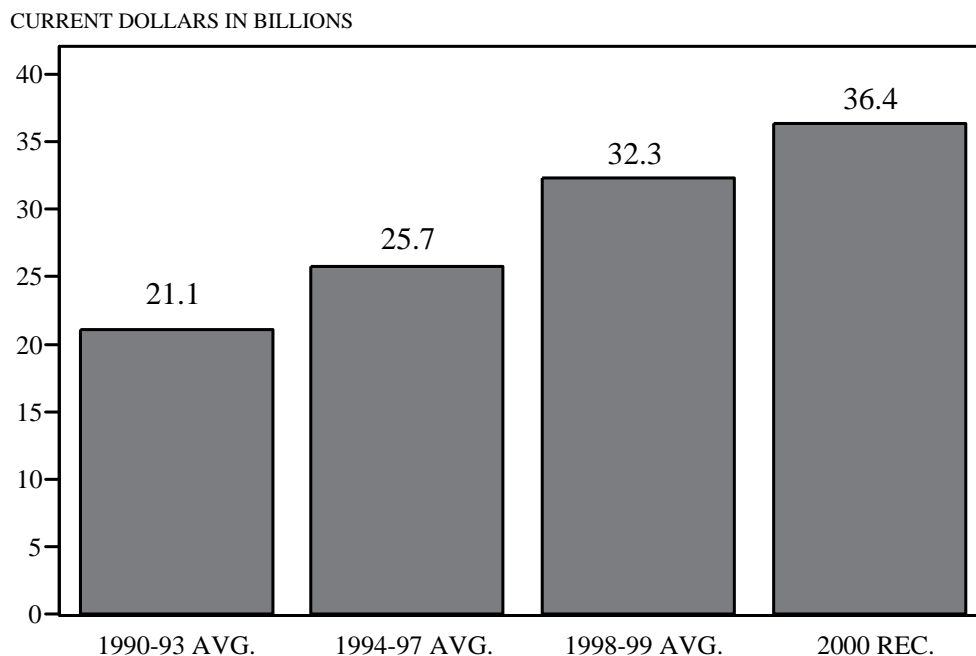
Innovative Financing: In the past six years, this Administration has taken innovative steps to sustain or accelerate fiscally responsible investment. Under the State Infrastructure Banks (SIB) program, eligible States can deposit certain Federal funds to assist sur-

face transportation projects. So far, States have capitalized \$526 million in federal funds in SIBs, and the banks have signed loan agreements to assist 41 projects.

Under the new Transportation Infrastructure Finance and Innovation Act (TIFIA), direct loans, loan guarantees, and standby lines of credit are provided to fill market gaps and encourage substantial private co-investment for infrastructure of critical importance, such as intermodal facilities, border crossing infrastructure, and expansion of multi-State highway trade corridors. With funding of \$81 million in 2000, this program has the potential to leverage up to \$1.8 billion in credit for major project investment.

Highways and Bridges: About 957,098 miles of roads and all bridges are eligible for Federal support, including the National Highway System and Federal lands roads. In 2000, the Federal Government plans to spend \$28 billion to maintain and expand these roads with funding from motor fuels taxes, mainly the gasoline tax. The Federal gas tax is 18.4

**Chart 20-2. INCREASING INVESTMENT IN AMERICA'S FUTURE:
FEDERAL FUNDING OF PUBLIC-USE
TRANSPORTATION INFRASTRUCTURE**



cents per gallon, of which 15.4 cents goes to the Highway Trust Fund's highway account, to finance formula grants to States for highway-related repair and improvement.

State and local governments provide 56 percent of total highway and bridge infrastructure spending, most of which they generate through their own fuel and vehicle taxes. The average State gasoline tax was 19.9 cents per gallon in 1997. State and local governments accelerate their infrastructure projects through debt financing, such as bonds and revolving loan funds. The Federal Highway Administration will work with State and local governments to:

- Increase the percentage of miles on the National Highway System (NHS) that meet pavement performance standards for acceptable ride quality—from 90.4 percent in 1996 to 91.8 percent in 2000.
- Reduce delays on Federal-aid highways from 9.2 hours of delay per 1,000 vehicle miles traveled in 1996 to 9.0 in 2000.
- Reduce the percentage of bridges on the NHS that are deficient—from 23.4 percent in 1997 to 22.5 percent in 2000.

Transit: As with highways, the Federal Government partners with State and local governments to improve mass transit. Of the Federal motor fuels tax, 2.85 cents a gallon goes to the Highway Trust Fund's Mass Transit Account, which funds transit grants to States and urban and rural areas. Federal capital grants comprise about half of the total spent each year to maintain and expand the Nation's 6,000 bus, rail, trolley, van, and ferry systems. Together, States and localities invest over \$3 billion a year on transit infrastructure and equipment.

In 2000, the Federal Government plans to spend \$5.6 billion on transit infrastructure, an eight-percent increase over 1999. The Federal role is especially important to finance capital-intensive urban bus and rail transit systems, as well as rural bus and van networks. Millions of Americans use transit for their daily commute, easing roadway congestion and reducing air pollution. Many riders depend on public transportation due to age, disability, or income. Transit can also provide economic opportunity—the Job

Access and Reverse Commute program will help to provide transportation services in urban, suburban and rural areas to assist welfare recipients and low income individuals reach employment opportunities. The Federal Transit Administration seeks to:

- Increase transit ridership from 39 billion passenger miles traveled in 1996 to 40.56 in 2000.

Passenger Rail: The Federal Government will invest \$571 million in 2000 to support the Nation's passenger rail system's capital improvements and equipment maintenance. The combination of Federal and private sector investment in Northeast Corridor will show results in 2000, with the beginning of high-speed rail service between Boston and New York which is estimated to reduce trip times by 35 percent. The Federal Railroad Administration, through capital funding, seeks to:

- Increase Amtrak's intercity ridership from 20.2 million passengers per year in 1996 to a record level of 24.7 million or more in 2000.

Aviation and Airports: The Federal Government seeks to ensure that the aviation system is safe, reliable, accessible, integrated, and flexible. In 2000, spending will continue the modernization of FAA air traffic control equipment, including upgrades to controller workstations that will improve reliability and capacity for future growth. Investments also include automation tools to optimally sequence aircraft, and planning to coordinate the flow of air traffic into major hubs. In addition, about 3,300 airports throughout the country are eligible for the Airport Improvement Program, which funds projects that enhance capacity, safety, security, and noise mitigation. These funds augment other airport funding sources, such as bond proceeds, State and local grants, and passenger facility charges. With 98 percent of the population living within 20 miles of one of these airports, most citizens have excellent access to air transportation. The Federal Aviation Administration seeks to:

- Reduce the rate of air travel delays by 5.5 percent from a 1992–1996 baseline of 181 delays per 100,000 activities to 171 in 2000. To accomplish this, the FAA seeks a 20 percent reduction in volume and

equipment related delays which cause about one quarter of all air travel delays.

Maritime Transportation: For our Nation's commercial shipping infrastructure, Federal loan guarantees make it easier to build and renovate vessels, while the Coast Guard establishes and operates radio and visual aids-to-navigation infrastructure that enables the safe movement of shipping. Port development is left largely to State and local authorities, which have invested over \$16 billion in infrastructure improvements over the past 50 years. The Maritime Administration seeks to:

- Attain a stable U.S. commercial shipbuilding orderbook of 520,000 gross tons by 2000.

Research and Technology

The Federal Government has an integral role in developing transportation technology. Federal research helps build stronger roads and bridges, design safer cars, reduce human error in operations, and improve the efficiency of existing infrastructure. In 2000, the Federal Government will spend over \$1.2 billion on transportation research and technology, 40 percent more than in 1999.

The DOT Joint Program Office's Intelligent Transportation Systems (ITS) program is developing and deploying technologies to help States and localities improve traffic flow and safety on streets and highways. ITS provides a cost-effective way to improve the management of our infrastructure, boosting efficiency and capacity. The private sector, which works closely with the ITS program, will deploy many of the technologies developed jointly with Federal funding.

The FAA's research, engineering, and development programs help improve safety, security, capacity, and efficiency in the National Airspace System. For example, the development of the advanced traffic management system and the demonstration of user preferred routing and navigation procedures will improve not only safety but the air system capacity and efficiency. In 2000, the budget includes work on improved modeling of airspace capacity; improved weather forecast processing, reporting, and use; and air travel delay forecasting/management technology.

Other FAA research will focus on the causes of human error; aircraft safety and fire protection methods; quieter engines and reduced aircraft emissions; and security and explosives detection systems.

The National Aeronautics and Space Administration's (NASA) Aeronautical Research and Technology Program funds partnerships with industry that may revolutionize the next generation of planes, making them safer, faster, more efficient, and more compatible with the environment.

Using technology, the Federal Government seeks to balance new physical capacity with the operational efficiency and safety of the Nation's existing transportation infrastructure. With this goal in mind, we will:

- Increase the number of metropolitan areas with integrated ITS infrastructure from 34 in 1997 to 50 in 2000.

DOT, NASA, the Defense Department, and private industry will work together on research to reduce the fatal aviation accident rate by a factor of five in 10 years. Research will focus on preventing equipment malfunctions, reducing human error, and ensuring the separation between aircraft and potential hazards.

Regulation of Transportation

Federal rules greatly influence transportation. In the past two decades, economic deregulation of the domestic railroad, airline, and interstate and intrastate trucking industries has reduced costs for consumers and shippers, while improving service.

The Federal Government also issues regulations that spur safer, cleaner transportation. The regulations—of cars, trucks, ships, trains, and airplanes—have substantially cut the number of transportation-related deaths and injuries, improved the safe handling of hazardous materials shipments, and helped reduce the number of oil spills.

Where regulations are used to meet our transportation safety, security, and environmental goals, the government aims for rulemakings that are cost-effective and make common sense. For example, in establishing security standards for passenger vessels and

associated terminals, the Coast Guard listened to public comment and tailored the rulemaking to be consistent with international standards while giving operators the flexibility to customize their plans and choice of equipment.

Tax Expenditures

For the most part, employees do not pay income taxes on what their employers pay

for parking and transit passes. These tax expenditures will cost the Government an estimated \$1.7 billion for 2000. To finance infrastructure, State and local governments issue tax-exempt bonds. The Federal costs in lost revenues are included in the calculations for Function 450, "Community and Regional Development," and Function 800, "General Government."